

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1586734

Luminaire Tested: 22CZSP-A-54HE-L835-S

Issue Date: 9/3/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1586734  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/3/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: METALUX  
Catalog Number: 22CZSP-A-54HE-L835-S  
Description: 2x2 CZSP LED Luminaire, 3500K CCT and 5000 lumens, 80CRI, Smooth Lens, Air Vented Housing  
Light Source: -  
Ballast/Driver: -

**Summary**

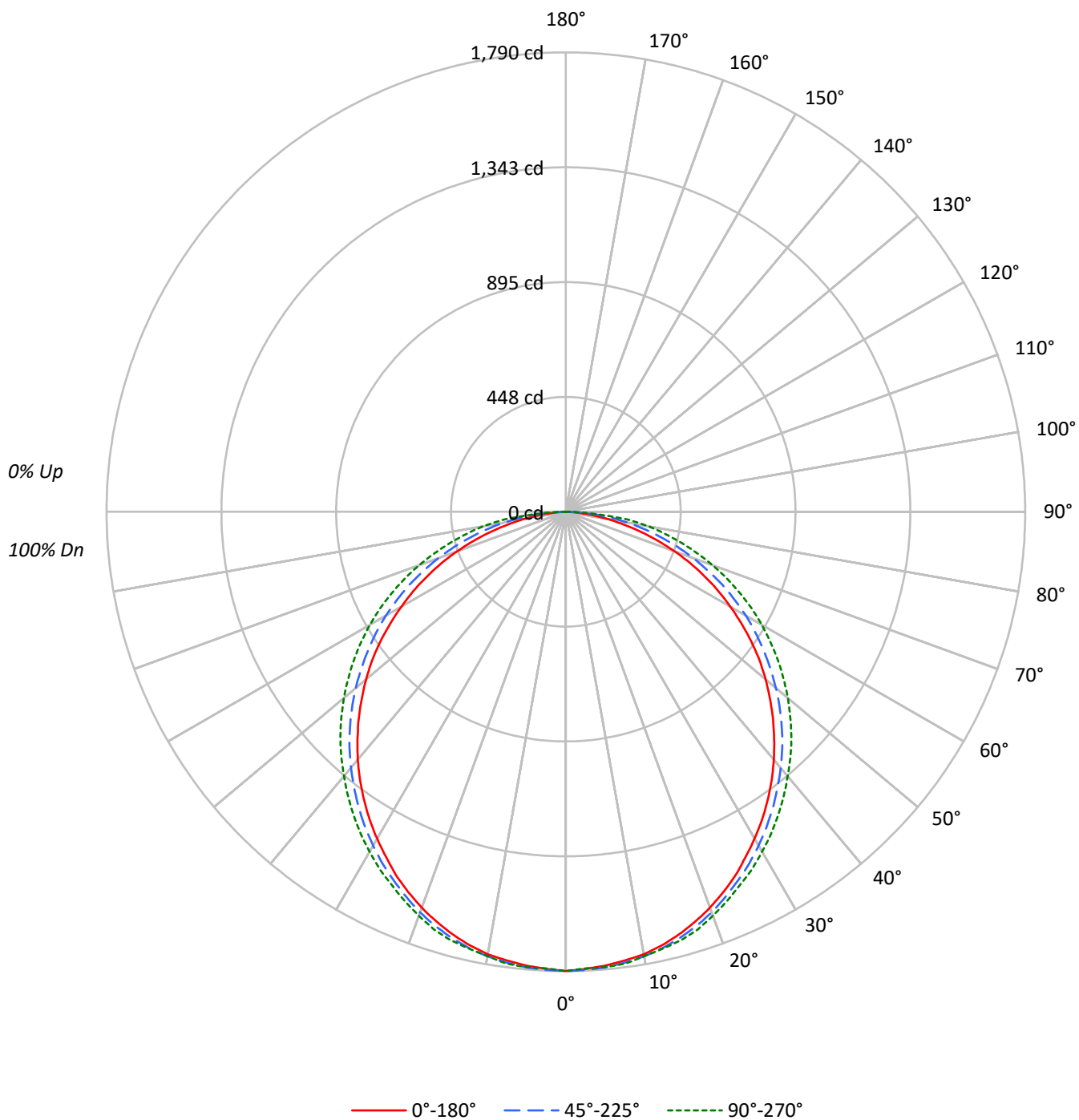
Lumens per Lamp: N/A  
Luminaire Lumens: 5225.0 lumens  
Efficiency: N/A  
Efficacy: 144.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 36.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P1586734

CATALOG NUMBER: 22CZSP-A-54HE-L835-S

### Luminous Intensity Polar Plot



TEST NUMBER: P1586734

CATALOG NUMBER: 22CZSP-A-54HE-L835-S

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |     |     |     |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |     |     | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 | 100 |
| 1   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 88  |  | 89  | 87  | 85  | 83  |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  |  | 81  | 76  | 72  |  | 78  | 74  | 71  | 69  |
| 3   | 89  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  |  | 71  | 65  | 61  |  | 69  | 64  | 60  | 57  |
| 4   | 82  | 69  | 60  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 56  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  |  | 57  | 50  | 45  |  | 55  | 49  | 44  | 42  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 40  |  | 51  | 44  | 39  |  | 50  | 44  | 39  | 37  |
| 7   | 64  | 50  | 42  | 35  | 62  | 50  | 41  | 35  | 48  | 40  | 35  |  | 47  | 40  | 35  |  | 45  | 39  | 34  | 32  |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 37  | 31  |  | 43  | 36  | 31  |  | 42  | 35  | 31  | 29  |
| 9   | 56  | 42  | 34  | 28  | 54  | 42  | 34  | 28  | 40  | 33  | 28  |  | 39  | 33  | 28  |  | 38  | 32  | 28  | 26  |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  |  | 37  | 30  | 25  |  | 36  | 30  | 25  | 23  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 5604 | 5604 | 5604 |
| 5°  | 5579 | 5600 | 5597 |
| 10° | 5567 | 5592 | 5589 |
| 15° | 5527 | 5571 | 5605 |
| 20° | 5471 | 5536 | 5582 |
| 25° | 5403 | 5478 | 5546 |
| 30° | 5319 | 5430 | 5530 |
| 35° | 5242 | 5378 | 5513 |
| 40° | 5155 | 5324 | 5497 |
| 45° | 5057 | 5270 | 5504 |
| 50° | 4948 | 5205 | 5501 |
| 55° | 4819 | 5132 | 5508 |
| 60° | 4638 | 5077 | 5522 |
| 65° | 4426 | 4978 | 5538 |
| 70° | 4125 | 4839 | 5564 |
| 75° | 3676 | 4647 | 5617 |
| 80° | 3038 | 4425 | 5893 |
| 85° | 1976 | 3995 | 5148 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 6079 cd/sqm

TEST NUMBER: P1586734

CATALOG NUMBER: 22CZSP-A-54HE-L835-S

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 169.3  | 3.2       |
| 10°-20°   | 484.7  | 9.3       |
| 20°-30°   | 730.9  | 14.0      |
| 30°-40°   | 880.4  | 16.8      |
| 40°-50°   | 919.4  | 17.6      |
| 50°-60°   | 844.4  | 16.2      |
| 60°-70°   | 665.1  | 12.7      |
| 70°-80°   | 408.0  | 7.8       |
| 80°-90°   | 122.8  | 2.4       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 1384.9 | 26.5      |
| 0°-40°    | 2265.3 | 43.4      |
| 0°-60°    | 4029.1 | 77.1      |
| 0°-90°    | 5225.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5225.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1790 | 1790  | 1790 | 1790  | 1790 |      |
| 5°  | 1775 | 1777  | 1782 | 1787  | 1780 | 169  |
| 15° | 1705 | 1708  | 1719 | 1729  | 1729 | 481  |
| 25° | 1564 | 1567  | 1586 | 1605  | 1605 | 720  |
| 35° | 1371 | 1378  | 1407 | 1435  | 1442 | 858  |
| 45° | 1142 | 1154  | 1190 | 1231  | 1243 | 880  |
| 55° | 883  | 899   | 940  | 993   | 1009 | 788  |
| 65° | 597  | 618   | 672  | 728   | 748  | 591  |
| 75° | 304  | 328   | 384  | 445   | 464  | 322  |
| 85° | 55   | 76    | 111  | 141   | 143  | 72   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |

TEST NUMBER: P1586734

CATALOG NUMBER: 22CZSP-A-54HE-L835-S

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1789.7 | 1789.7 | 1789.7 | 1789.7 | 1789.7 |
| 2.5°  | 1782.8 | 1786.3 | 1787.4 | 1788.6 | 1780.5 |
| 5°    | 1774.8 | 1777.1 | 1781.7 | 1787.4 | 1780.5 |
| 7.5°  | 1763.3 | 1765.6 | 1771.4 | 1779.4 | 1775.9 |
| 10°   | 1750.7 | 1751.9 | 1758.7 | 1764.5 | 1757.6 |
| 12.5° | 1730.1 | 1733.5 | 1741.5 | 1746.1 | 1743.8 |
| 15°   | 1704.9 | 1708.3 | 1718.6 | 1728.9 | 1728.9 |
| 17.5° | 1675.1 | 1679.6 | 1692.2 | 1706.0 | 1707.2 |
| 20°   | 1641.8 | 1645.2 | 1661.3 | 1675.1 | 1675.1 |
| 22.5° | 1604.0 | 1608.6 | 1624.6 | 1639.5 | 1641.8 |
| 25°   | 1563.8 | 1567.3 | 1585.6 | 1605.1 | 1605.1 |
| 27.5° | 1516.8 | 1523.7 | 1546.6 | 1566.1 | 1570.7 |
| 30°   | 1471.0 | 1476.7 | 1501.9 | 1526.0 | 1529.4 |
| 32.5° | 1422.8 | 1429.7 | 1456.1 | 1482.4 | 1488.2 |
| 35°   | 1371.2 | 1378.1 | 1406.8 | 1435.4 | 1442.3 |
| 37.5° | 1317.3 | 1325.4 | 1355.2 | 1388.4 | 1395.3 |
| 40°   | 1261.2 | 1270.3 | 1302.4 | 1338.0 | 1344.9 |
| 42.5° | 1201.5 | 1214.2 | 1248.5 | 1285.2 | 1295.6 |
| 45°   | 1141.9 | 1154.5 | 1190.1 | 1231.4 | 1242.8 |
| 47.5° | 1078.9 | 1093.8 | 1130.5 | 1174.0 | 1186.6 |
| 50°   | 1015.8 | 1030.7 | 1068.5 | 1115.6 | 1129.3 |
| 52.5° | 951.6  | 966.5  | 1005.5 | 1054.8 | 1069.7 |
| 55°   | 882.8  | 898.9  | 940.1  | 992.9  | 1008.9 |
| 57.5° | 811.7  | 832.4  | 875.9  | 929.8  | 945.9  |
| 60°   | 740.6  | 761.3  | 810.6  | 863.3  | 881.7  |
| 62.5° | 670.7  | 690.2  | 740.6  | 796.8  | 816.3  |
| 65°   | 597.3  | 618.0  | 671.9  | 728.0  | 747.5  |
| 67.5° | 525.1  | 545.7  | 599.6  | 658.1  | 678.7  |
| 70°   | 450.6  | 473.5  | 528.5  | 587.0  | 607.7  |
| 72.5° | 376.1  | 400.1  | 456.3  | 515.9  | 535.4  |
| 75°   | 303.8  | 327.9  | 384.1  | 444.8  | 464.3  |
| 77.5° | 232.7  | 259.1  | 314.1  | 376.1  | 394.4  |
| 80°   | 168.5  | 193.8  | 245.4  | 306.1  | 326.8  |
| 82.5° | 107.8  | 129.6  | 181.1  | 238.5  | 253.4  |
| 85°   | 55.0   | 75.7   | 111.2  | 141.0  | 143.3  |
| 87.5° | 17.2   | 24.1   | 36.7   | 55.0   | 56.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P1586734

CATALOG NUMBER: 22CZSP-A-54HE-L835-S

**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 17.47            | 19.13 | 17.83 | 19.44 | 19.76 | 18.30          | 19.96 | 18.66 | 20.27 | 20.59 |
|                 | 3H   | 19.22            | 20.73 | 19.60 | 21.06 | 21.41 | 20.41          | 21.92 | 20.79 | 22.25 | 22.61 |
|                 | 4H   | 19.84            | 21.26 | 20.24 | 21.61 | 21.98 | 21.30          | 22.72 | 21.70 | 23.07 | 23.45 |
|                 | 6H   | 20.25            | 21.57 | 20.66 | 21.94 | 22.33 | 22.08          | 23.40 | 22.49 | 23.77 | 24.16 |
|                 | 8H   | 20.36            | 21.62 | 20.78 | 22.01 | 22.41 | 22.40          | 23.67 | 22.83 | 24.05 | 24.45 |
|                 | 12H  | 20.41            | 21.62 | 20.84 | 22.00 | 22.43 | 22.61          | 23.82 | 23.04 | 24.21 | 24.63 |
| 4H              | 2H   | 18.24            | 19.66 | 18.64 | 20.01 | 20.38 | 18.88          | 20.31 | 19.28 | 20.65 | 21.03 |
|                 | 3H   | 20.22            | 21.41 | 20.62 | 21.81 | 22.21 | 21.24          | 22.44 | 21.65 | 22.83 | 23.23 |
|                 | 4H   | 20.95            | 22.04 | 21.38 | 22.45 | 22.89 | 22.29          | 23.38 | 22.72 | 23.79 | 24.22 |
|                 | 6H   | 21.48            | 22.43 | 21.93 | 22.87 | 23.33 | 23.24          | 24.20 | 23.70 | 24.64 | 25.09 |
|                 | 8H   | 21.63            | 22.52 | 22.09 | 22.96 | 23.42 | 23.64          | 24.53 | 24.10 | 24.97 | 25.44 |
|                 | 12H  | 21.71            | 22.51 | 22.19 | 22.99 | 23.46 | 23.92          | 24.72 | 24.40 | 25.20 | 25.66 |
| 8H              | 4H   | 21.41            | 22.30 | 21.87 | 22.74 | 23.21 | 22.58          | 23.47 | 23.04 | 23.91 | 24.38 |
|                 | 6H   | 22.07            | 22.82 | 22.56 | 23.30 | 23.78 | 23.69          | 24.44 | 24.18 | 24.92 | 25.40 |
|                 | 8H   | 22.28            | 22.95 | 22.79 | 23.46 | 23.94 | 24.20          | 24.87 | 24.71 | 25.38 | 25.86 |
|                 | 12H  | 22.42            | 23.01 | 22.93 | 23.50 | 24.06 | 24.59          | 25.18 | 25.09 | 25.67 | 26.23 |
| 12H             | 4H   | 21.50            | 22.30 | 21.98 | 22.78 | 23.25 | 22.60          | 23.41 | 23.08 | 23.88 | 24.35 |
|                 | 6H   | 22.20            | 22.87 | 22.71 | 23.38 | 23.86 | 23.74          | 24.41 | 24.25 | 24.91 | 25.40 |
|                 | 8H   | 22.48            | 23.07 | 22.99 | 23.56 | 24.12 | 24.32          | 24.91 | 24.82 | 25.40 | 25.96 |